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# Rhodora

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#### TRADESCANTIA EDWARDSIANA, NOV. SP.

B. C. THARP

SOME ten years ago, on a botanical trip to the Blanco River thirty miles southwest of Austin, Texas, a striking *Tradescantia* was discovered growing along a half-shaded gravel terrace bordering a tributary creek. The plants were robust in stature, bright green in color, with leaves relatively much broader than is usual for the genus, and with three well-developed but unequal bracts subtending a dense inflorescence of blue (occasionally pink or white) flowers each some 2.0–2.5 cm. in diameter.

An abundance of material was collected, and a description based upon careful study of fresh material was written. A year or two later the plant was found growing in a similar situation along Bull Creek, a tributary of the Colorado River a few miles above Austin. Material transplanted from the latter place and grown under observation along with other Texas species has confirmed the opinion that it represents an undescribed species. For it the name *Tradescantia edwardsiana* is proposed as appropriate in indicating the region, the Edwards Plateau, in which it is found. A description follows:

*TRADESCANTIA edwardsiana*, nov. sp., affinis *T. humili* Rose, sed differt habitu altiore et foliis latioribus. Caulis 4–7 dm. altus, inferne simplex, sursum ramosus; folia lanceolata vel lineari-lanceolata, 2.5–6.5 cm. lata; pedicelli, sepala et ovarium glanduloso-pubescentia.

*Stems* 4–7 dm. tall, rather stout, 1–1.2 cm. thick at base, simple below or 2 or 3 from a common base, lower stem-internodes varying from 1 cm. to more than 5 cm. long, at length widely branched above,





Fig. 1. *TRADESCANTIA EDWARDSIANA*,  $\times \frac{4}{5}$ . Drawn by *Eula Whitehouse*.

the primary branches frequently in turn branched, lower internodes sparsely, the upper thickly clothed with very short, simple, conic white hairs; *leaf blades* lanceolate to linear-lanceolate, 2.5–6.5 cm. wide x 2–3 dm. long, acuminate, bright green above, somewhat glaucous beneath, clothed on both upper and lower surfaces with hairs like those on the stem, the somewhat undulate edges rough with a copious supply of same; *lower sheaths* sometimes nearly 3 cm. long (hence exceptionally imbricated on stems with short internodes) upper sometimes as short as 0.5 cm., nearly glabrous except the short ciliate margins; *bracts* of the involucre 2 or 3, very unequal, similar to leaves except more crisped and also asymmetrical, not at all saccate at base, at maturity more or less reflexed; *cymes* 3–5-rayed, few to many (15–nearly 100) flowered; *mature pedicels* about 3 cm. long, ciliate with yellowish hairs which are simple at base and increasingly glandular toward the capsule in young buds but nearly all simple in mature pedicels, hairs also about twice as long (0.7 mm.) at apex as at base, each pedicel subtended by a white, lavender-margined or green, asymmetrical, abruptly acute bractlet 5 mm. long x 2.5 mm. broad which is sparsely pubescent on the lower surface especially along the midrib; *bractlets* in each ray 2-ranked, approximate in each rank, oblique (the outer edge higher, the inner lower on the axis of the ray); *sepals* lanceolate, asymmetrical, 3–4 x 8–9 mm., like the pedicels pubescent with yellowish glandular hairs; *corolla* pale blue to nearly pure white or sometimes slightly lavender, petals about 10–12 mm. long, very broadly ovate; *filaments* rather slender, about 5 mm. long, a little darker than the petals, *anthers* at first erect, the pollen-sacs separated by a very broad connective at the top but somewhat converging below, bright yellow; *ovary* copiously pubescent with short white glandular hairs; *style* (including ovary) little more than half as long as the filaments, white or pale blue, flexuous; *stigma* terminal, brush-like, composed of very short white hairs; *capsule* oblong, 4–5 mm. broad, about twice as long, obtuse at both ends, slightly constricted in the center, usually 3-celled (rarely 4-celled), pubescence about 1 mm. long, hairs reflexed, of the same character as those on calyx and upper part of pedicels; *ovules* normally six (rarely eight), 2 in each cavity; *seeds* 2 x 4 mm., grey, transversely wrinkled, with linear longitudinal ridges extending nearly the length of the seed.—Moist alluvial terraces and ravines of the Edwards Plateau. Specimens collected: Blanco River in Hayes County; Bull Creek in Travis County, TEXAS.

The type specimen (Tharp no. 7944) collected by B. C. Tharp on the Blanco River 7 miles northwest of Kyle, Texas, April 4, 1921, is deposited in the herbarium of the University of Texas.

UNIVERSITY OF TEXAS.

## A LIST OF NEW ENGLAND RUSTS COLLECTED IN 1931

GEORGE H. HEPTING

THE following is a list of rusts collected by Dr. Perley Spaulding and the writer in the states of New Hampshire, Vermont, Massachusetts, and Connecticut, during the year 1931. The first three states are well represented, but relatively few collections were made in Connecticut. The greater part of the determinations were made by the writer, but the rusts on *Carex* and a few others, the identity of which were in some doubt, were named by Dr. J. C. Arthur. Those specimens identified by Dr. Arthur, and those collected by persons other than Dr. Spaulding and the writer, are so indicated. Material of each collection cited is in the herbarium of the writer.

Much thanks is due to Dr. Perley Spaulding of the Office of Forest Pathology, U. S. Department of Agriculture, for his interest, guidance, and assistance in the collecting of specimens; to Dr. Ray E. Torrey of Massachusetts State College for the identification of the host plants; and to Dr. J. C. Arthur for the naming of some of the more difficult forms.

The nomenclature adopted is essentially that used by Arthur in the North American Flora, excepting that the genera *Puccinia* and *Uromyces* are retained, and the clover rusts are separated according to Davis (*Mycol.* 16: 203-219. 1924). With but few exceptions the names conform with those used by Hunt in his treatment of the New England rusts (*Conn. State Geol. and Nat. Hist. Surv. Bul.* 36: 1-198. 1926). In naming the host plants, Gray's Manual, 7th edition, was followed wherever possible.

The list is arranged as follows: the rusts are listed alphabetically; beneath each species is given the hosts upon which the rust was found, these also arranged alphabetically; following the host is given the state and town in which the collection was made, followed by the stages of the rust found (I, aecial, II, uredinial, III, telial). Hunt's list of New England rusts, which brings together all of the previously published rusts of the region up to 1926, is used as a basis here in reporting a rust or a host as new. None of the forms reported here as new are given either in Hunt's list or in the U. S. Plant Disease Reporter to date or the U. S. Plant Disease Reporter Supplements to date, for the states indicated.

The following is the system for indicating new hosts or rusts:



Single asterisk preceding rust . . . . .	New rust for New England
Single asterisk preceding host . . . . .	New host for New England
Double asterisk preceding host . . . . .	New host for the rust
Single asterisk preceding state . . . . .	New host for the state
Double asterisk preceding state . . . . .	New rust for the state

CALYPTOSPORA COLUMNARIS (Alb. & Schw.) Kühn. *Vaccinium canadense* Kalm. N. H., Bethlehem, II.

COLEOSPORIUM DELICATULUM (Arth. & Kern) Hedge. & Long. *Solidago graminifolia* (L.) Salisb. MASS., Amherst, II, III; Orleans, III; VT., Townsend, II, III.

COLEOSPORIUM SOLIDAGINIS (Schw.) Thüm. \**Aster acuminatus* Michx. VT., Mt. Tabor, II. *Aster cordifolius* L. CONN., E. Granby, II. Coll. H. G. Eno; N. H., Bartlett, II; Bath, II, III; VT., Townsend, II. *Aster macrophyllus* L. \*MASS., Wood's Hole, III. *Aster novi-belgii* L. MASS., Barnstable, II. *Aster puniceus* L. CONN., E. Granby, II; N. H., Fabyans, II, III; VT., Townsend, II. *Aster paniculatus* Lam. MASS., Barnstable, II. *Aster umbellatus* Mill. N. H., Jefferson, III. *Callistephus hortensis* Cass. CONN., E. Granby, II. *Pinus resinosa* Ait. N. H., Bethlehem, I. *Solidago bicolor* L. MASS., Sandwich, II; VT., Brattleboro, II. *Solidago caesia* L. CONN., N. Bloomfield, II, Coll. H. G. Eno. *Solidago caesia* L. var. *axillaris* (Pursh) Gray. CONN., N. Bloomfield, II. Coll. H. G. Eno; \*VT., Mt. Tabor, II, III. *Solidago canadensis* L. CONN., E. Granby, II, Coll. H. G. Eno; N. H., Bethlehem, II; VT., Groton, II, III; Brattleboro, II, III. *Solidago juncea* Ait. CONN., E. Granby, II, Coll. H. G. Eno; \*MASS., Petersham, III; N. H., Bath, II, III; VT., Townsend, II. *Solidago latifolia* L. CONN., N. Bloomfield, II, Coll. H. G. Eno; \*N. H., Fabyans, II. *Solidago nemoralis* Ait. N. H., Bartlett, II. *Solidago odora* Ait. MASS., Sandwich, II, III. *Solidago rugosa* Mill. CONN., E. Granby, II, Coll. H. G. Eno; MASS., Petersham, III; Wellfleet, III; N. H., Bethlehem, II; VT., Townsend, II. *Solidago sempervirens* L. MASS., Wellfleet, II, III.

CRONARTIUM COMPTONIAE Arth. *Myrica asplenifolia* L. MASS., Petersham, II, III; Truro, III; N. H., Franklin, II, III.

CRONARTIUM RIBICOLA Fischer. *Ribes cynosbati* L. N. H., Bethlehem, II, III. *Ribes lacustre* (Pers.) Poir. N. H., Crawfords, II, III. *Ribes prostratum* L'Hér. N. H., Bethlehem, III. *Ribes triste* Pall. N. H., Fabyans, II, III.

FROMMEA OBTUSA (Strauss) Arth. *Potentilla canadensis* L. CONN., Salisbury III; E. Granby II, III (Det. J. C. Arthur); MASS., Amherst, II; N. H., Bethlehem, II; VT., Winhall, II, III.

GYMNOCONIA INTERSTITIALIS (Schl.) Lagerh. (The long- and the short-cycled forms are considered together.) *Rubus allegheniensis* Porter. N. H., Franconia I; Waterville, I. *Rubus canadensis* L. N. H., Bartlett, III. *Rubus villosus* Ait. MASS., Amherst, I.

GYMNOSPORANGIUM CORNUTUM (Pers.) Arth. *Pyrus americana* (Marsh.) DC. N. H., Pinkham Notch, I.

GYMNOSPORANGIUM GERMINALE (Schw.) Kern. *Crataegus* sp. MASS., Petersham, I.

GYMNOSPORANGIUM GLOBOSUM Farl. I. *Crataegus* sp. CONN., E. Granby, I; MASS., Petersham, I; VT., Brattleboro, I. *Juniperus virginiana* L. MASS., Dennis, III. *Pyrus Malus* L. CONN., E. Granby, I; MASS., Dennis, I.

GYMNOSPORANGIUM JUNIPERI-VIRGINIANAE Schw. *Pyrus Malus* L. CONN., Simsbury, I; MASS., Amherst, I.

KUEHNEOLA UREDINIS (Link) Arth. *Rubus allegheniensis* Porter. MASS., Petersham, II; Sandwich, II; VT., Winhall, II. *Rubus* sp. VT., Mt. Tabor, II, III (Det. J. C. Arthur).

MELAMPSORA BIGELOWII (Thüm.) Arth. *Salix cordata* Muhl. VT., Mt. Holly, II, III. *Salix discolor* Muhl. N. H., Bethlehem, II. \**Salix rostrata* Rich. N. H., Twin Mt., II, Bethlehem, II.

MELAMPSORA EUPHORBIAE (Schub.) Cast. II. *Euphorbia Cyparissias* L. N. H., Newport, II.

MELAMPSORA HUMBOLDTIANA Speg. *Salix cordata* Muhl. \*N. H., Jefferson, II, III; VT., Townsend, II, III. \**Salix discolor* Muhl. VT., Peru, II, III. *Salix* sp. MASS., Brewster, II (Det. J. C. Arthur).

MELAMPSORA MEDUSAE Thüm. *Larix laricina* (Du Roi) Koch. \*N. H., Twin Mt. I (Det. J. C. Arthur). *Populus tremuloides* Michx. CONN., E. Granby, II, III, Coll. H. G. Eno; MASS., Petersham, II, III; Sandwich, II, III; N. H., Twin Mt., II; VT., Groton, II, III; Townsend, II, III.

MELAMPSORELLA ELATINA (Alb. & Schw.) Arth. I. *Abies balsamea* (L.) Mill. N. H., Twin Mt. I.

MELAMPSORIDIUM BETULAE (Schum.) Arth. *Betula populifolia* Marsh. MASS., Sandwich, II.

MELAMPSOROPSIS ABIETINA (Alb. & Schw.) Arth. *Ledum groenlandicum* Oeder. N. H., Franconia, II.

MELAMPSOROPSIS CASSANDRAE (Pk. & Clint.) Arth. *Chamaedaphne calyculata* (L.) Moench. N. H., Franconia, II. \**Picea pungens* Engelm. N. H., Madison, I, Coll. S. H. Boomer.

MELAMPSOROPSIS LEDICOLA (Pk.) Arth. *Picea mariana* (Mill.) B. S. P. N. H., Franconia, I (Det. J. C. Arthur).

PHRAGMIDIUM AMERICANUM Diet. *Rosa humilis* Marsh. MASS., Eastham, II, III. *Rosa virginiana* Mill. \*\*N. H., Bretton Woods, II, III (Det. J. C. Arthur).

PUCCINIA ANEMONES-VIRGINIANAE Schw. *Anemone virginiana* L. VT., Brattleboro, III.

PUCCINIA ANGUSTATA Peck. *Lycopus uniflorus* Michx. \*N. H., Waterville, I. *Scirpus atrocinctus* Fern. N. H., Bartlett, II, III.

PUCCINIA ASPARAGI DC. *Asparagus officinalis* L. MASS., Eastham, III.

PUCCINIA ASTERIS Duby. *Aster acuminatus* Michx. N. H., Twin Mt., III. *Aster cordifolius* L. VT., Townsend, III. *Aster macrophyllus* L. N. H., Waterville, III; VT., Mt. Tabor, III. *Aster puniceus* L. \*CONN., E. Granby, III.



PUCCINIA ASTERUM (Schw.) Kern. \**Aster acuminatus* Michx. N. H., Fabyans, I. *Aster puniceus* L. N. H., Fabyans, I. *Carex scoparia* Schkuhr. \*N. H., Fabyans, II, III (Det. J. C. Arthur). *Carex straminea* Willd. \*Vt., Townsend, II, III (Det. J. C. Arthur). *Solidago graminifolia* (L.) Salisb. \*N. H., Franconia, I; Twin Mt., I; R. I., Block Island, I. \**Solidago latifolia* L. N. H., Fabyans, I; Twin Mt., I.

PUCCINIA BARDANAE Corda. *Arctium minus* Bernh. MASS., Amherst, III; Wellfleet, III; \*\*Vt., Peru, III.

PUCCINIA CIRCAEAE Pers. *Circaea alpina* L. N. H., Franconia, III; Vt., Brattleboro, III.

PUCCINIA CLEMATIDIS (DC.) Lagerh. *Agropyron repens* (L.) Beauv. N. H., Franconia, II (Det. J. C. Arthur). \*\**Cinna latifolia* L. N. H., Fabyans, II (Det. J. C. Arthur). *Clematis virginiana* L. N. H., Fabyans, I. *Thalictrum polygamum* Muhl. \*N. H., Fabyans, I.

PUCCINIA CORONATA Corda. \*\**Ammophila breviligulata* Fern. MASS., Provincetown, II, III. *Calamagrostis canadensis* (Michx.) Beauv. \*N. H., Jefferson, III.

PUCCINIA CYANI (Schleich.) Pass. *Centaurea Cyanus* L. MASS., Amherst, III.

PUCCINIA DISPERSA Erics. *Secale cereale* L. MASS., Sandwich, II, III.

PUCCINIA ERIOPHORI Thüm. *Senecio Robbinsii* Oakes. N. H., Waterville, I.

PUCCINIA GRAMINIS Pers. *Agropyron repens* (L.) Beauv. MASS., Amherst, III. *Agrostis alba* L. MASS., Chatham, III; N. H., Bath, III; Vt., Winhall, III; *Berberis vulgaris* L. MASS., Amherst, I. *Phleum pratense* L. MASS., Amherst, II; N. H., Jefferson, II; Vt., Winhall, II.

PUCCINIA GROSSULARIAE (Schum.) Lagerh. *Carex arctata* Boott. \*Vt., Mt. Tabor, II, III (Det. J. C. Arthur). *Carex crinita* Lam. N. H., Jefferson, II, III (Det. J. C. Arthur); Fabyans, II (Det. J. C. Arthur); Vt., Winhall, II, III (Det. J. C. Arthur). *Carex debilis* Michx. \*N. H., Franconia, II; Fabyans, II (Det. J. C. Arthur). *Carex intumescens* Rudge. N. H., Franconia, II (Det. J. C. Arthur). \**Carex scabrata* Schw. N. H., Fabyans, II (Det. J. C. Arthur). *Ribes prostratum* L'Hér. N. H., Bethlehem, I.

PUCCINIA HELIANTHI Schw. *Helianthus annuus* L. \*N. H., Newport, III; Vt., Winhall, III. *Helianthus decapetalus* L. CONN., N. Bloomfield, III, Coll. H. G. Eno; Vt., Townsend, III. *Helianthus tuberosus* L. CONN., E. Granby, II, Coll. H. G. Eno; Vt., Townsend, III.

PUCCINIA HEUCHERAE (Schw.) Diet. *Tiarella cordifolia* L. N. H., Bethlehem, III.

PUCCINIA HIERACII (Schum.) Mart. *Taraxacum officinale* Weber. MASS., Amherst, II; Falmouth, III; N. H., Crawfords, II, III; Vt., Mt. Tabor, III.

\*PUCCINIA LOBELIAE W. Gerard. *Lobelia siphilitica* L. Conn., Salisbury, III.

PUCCINIA MALVACEARUM Bert. *Althaea rosea* Cav. Conn., E. Granby, III, Coll. *H. G. Eno*; MASS., Amherst, III; Falmouth, III; N. H., Bartlett, III; VT., Peru, III. *Malva rotundifolia* L. MASS., Eastham, III; N. H., Bartlett, III.

PUCCINIA MESOMAJALIS B. & C. *Clintonia borealis* (Ait.) Raf. N. H., Fabyans, III.

PUCCINIA ORBICULA Pk. & Clint. *Prenanthes altissima* L. N. H., Fabyans, II, III.

PUCCINIA PIMPINELLAE (Str.) Mart. *Osmorrhiza Claytoni* (Michx.) Clarke. \*N. H., Fabyans, II, III.

PUCCINIA POLYGONI-AMPHIBII Pers. *Polygonum virginianum* L. Conn., E. Granby, II, III, Coll. *H. G. Eno*.

PUCCINIA PUNCTATA Link. *Galium asprellum* Michx. N. H., Twin Mt., I.

PUCCINIA RECEDENS Sydow. \*\**Senecio Robbinsii* Oakes. N. H., Bethlehem, III.

PUCCINIA SAMBUCI (Schw.) Kern. *Carex lurida* Wahlenb. \*VT., Townsend, II, III (Det. *J. C. Arthur*).

PUCCINIA SEYMOURIANA Arth. *Spartina Michauxiana* Hitchc. MASS., Barnstable, III.

PUCCINIA SUAVEOLENS (Pers.) Rostr. III. *Cirsium arvense* (L.) Scop. VT., Mt. Tabor, III.

PUCCINIA VIOLAE (Schum.) DC. *Viola pallens* (Banks) Brainerd. \*N. H., Franconia, I. *Viola sp.* MASS., Falmouth, III; N. H., Franconia, II, III; Crawford, I, II; Hanover, III; VT., Mt. Tabor, III.

\*PUCCINIA WALDSTEINIAE M. A. Curtis. *Waldsteinia fragarioides* (Michx.) Tratt. VT., Mt. Holly, III.

PUCCINIASTRUM AGRIMONIAE (Schw.) Tranz. *Agrimonia gryposepala* Wallr. Conn., Bloomfield, II; VT., Mt. Tabor, II.

PUCCINIASTRUM AMERICANUM (Farl.) Arth. *Rubus idaeus* L. var. *aculeatissimus* (C. A. Mey.) R. & T. N. H., Twin Mt., II; Fabyans, II; \*\*VT., Townsend, II.

PUCCINIASTRUM ARCTICUM (Lagerh.) Tranz. *Rubus triflorus* Richards. N. H., Fabyans, II; Bartlett, II; \*\*VT., Peru, II.

PUCCINIASTRUM MYRTILLI (Schum.) Arth. *Gaylussacia baccata* (Wang.) C. Koch. MASS., Wellfleet, II; \*VT., Mt. Tabor, II. *Rhododendron canadense* (L.) B. S. P. N. H., Jefferson, II, III. \*\**Rhododendron roseum* (Loisel.) Rehder. \*VT., Mt. Tabor, II. *Vaccinium pennsylvanicum* Lam. N. H., Fabyans, II. \*\**Vaccinium Vitis-idaea* L. N. H., Franconia, II (Det. *J. C. Arthur*).

PUCCINIASTRUM POTENTILLAE Kom. *Potentilla tridentata* Ait. N. H., Bartlett, II.

PUCCINIASTRUM PUSTULATUM (Pers.) Diet. *Epilobium angustifolium* L. N. H., Bethlehem, II, III; VT., Mt. Tabor, II, III. \**Epilobium hirsutum* L. MASS., Wellfleet, II.

UREDINOPSIS MIRABILIS (Pk.) Magn. I. *Abies balsamea* (L.) Mill. N. H., Bethlehem, I. *Onoclea sensibilis* L. MASS., Petersham, II, III; N. H., Bethlehem, II; Vt., Winhall, II.

UREDINOPSIS OSMUNDAE Magn. *Abies balsamea* (L.) Mill. N. H., Bethlehem, I. *Osmunda cinnamomea* L. MASS., Petersham, II, III; N. H., Bethlehem, II, III; \*Vt., Townsend, III. *Osmunda Claytoniana* L. N. H., Fabyans, II.

UROMYCES APPENDICULATUS (Pers.) Lèv. *Phaseolus vulgaris* L. N. H., Bartlett, II, III.

UROMYCES CALADII (Schw.) Farl. *Arisaema triphyllum* (L.) Schott. Vt., Bethel, I.

\*UROMYCES DACTYLIDIS Otth. *Dactylis glomerata* L. MASS., Brewster, II, III. (Det. J. C. Arthur).

UROMYCES FABAE (Pers.) DeBary. *Vicia Cracca* L. Vt., Mt. Tabor, II, III.

UROMYCES HOUSTONIATUS (Schw.) Sheld. *Houstonia caerulea* L. Conn., E. Granby, I; N. H., Twin Mt., I.

UROMYCES HYBRIDI Davis. *Trifolium hybridum* L. N. H., Twin Mt., II; Franconia, III; Vt., Bethel, III.

UROMYCES HYPERICI-FRONDOSI (Schw.) Arth. *Hypericum ellipticum* Hook. N. H., Pinkham Notch, I, II, III.

UROMYCES LESPEDEZAE-PROCUMBENTIS (Schw.) Curt. *Lespedeza hirta* (L.) Horn. MASS., Sandwich, III.

UROMYCES POLYGONI (Pers.) Fckl. *Polygonum aviculare* L. MASS., Amherst, II, III; Brewster, II, III.

UROMYCES TRIFOLII (Hedw. f.) Lèv. *Trifolium pratense* L. MASS., Amherst, II; Yarmouth, II, III; N. H., Bartlett, II; Vt., Townsend, II, III.

UROMYCES TRIFOLII-REPENTIS (Cast.) Liro. *Trifolium repens* L. MASS., Sandwich, III; N. H., Twin Mt., II; Vt., Townsend, III.

DEPARTMENT OF PLANT PATHOLOGY,  
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TWO CONTEMPORARY EVALUATIONS OF THE COLONIZATION BY SIR WALTER RALEIGH.—For several years I have had the title Fisher Professor of Natural History; consequently I very regularly receive announcements and circulars of historical and governmental institutions and publications, addressed to me at the "Department of History." Since I can scarcely hope to justify such a gratuitous distinction by original studies, I may perhaps be pardoned, as a natural "historian," for drawing out of practical oblivion the following illuminating passages. The first, written by John Gerard and published in 1597, accompanied an account of *Asclepias* or Milkweed:



There groweth in that part of Virginia, or Norembega, where our English men dwelled (intending there to erect a Colony) a kind of *Asclepias*, or Swallow woort, which the Sauages call *Wisanck*: . . . . .

It groweth, as before is rehearsed, in the countries of Norembega, and now called Virginia by the H. sir *Walter Raleigh*, who hath bestowed great summes of monie in the discoverie therof, where are dwelling at this present English men, if neither vntimely death by murdering, or pestilence, corrupt aire, bloodie fixes, or some other mortall sicknes hath not destroyed them.<sup>1</sup>

Before 1633, when Thomas Johnson's edition of Gerard was published, Raleigh's venture had justified itself. The pessimism expressed by Gerard had disappeared. The second passage in Gerard, with Sir Walter spoken of with a degree more of respect, was thus abbreviated in Johnson's edition:

It groweth, as before is rehearsed, in the countries of Norembega, now called Virginia by the honourable Knight Sir *Walter Raleigh*, who hath bestowed great summes of money in the discoverie thereof; where are dwelling at this present English men.<sup>2</sup>—M. L. FERNALD.

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SOME INTERESTING PLANTS FROM THE NORTH SHORE OF THE ST. LAWRENCE.—While on a motor-trip last June, I took the drive from Quebec to Baie St. Paul, along the north shore of the St. Lawrence. At St. Tite des Caps, where the road winds over a table-land about 1500 feet above sea-level, the swampy hollows were filled with a conspicuous purple-flowered plant. This proved to be *Pedicularis palustris* L., new to me but already well-known from the lower St. Lawrence. In one of the swampy fields, the moss was covered with a mat of *Montia lamprosperma* Cham. It seemed strange to me to find this little plant so high above sea-level.

At Baie St. Paul, the cliffs facing the St. Lawrence proved to be of a calcareous nature, covered with *Draba arabisans* Michx., *Symphoricarpos racemosus* Michx., *Shepherdia canadensis* (L.) Nutt. and *Clematis verticillaris* DC., with such calciphiles as *Cryptogramma Stelleri* (Gmel.) Prantl and *Carex eburnea* Boott in the wet places; but nothing unusual was found. On the next day, I explored a bluff near the Rivière du Gouffre, about five miles above Baie St. Paul. Its dry, rocky slopes harbored *Shepherdia*, *Potentilla arguta* Pursh, *Carex Deweyana* Schwein. and *Thelypteris fragrans*, var. *Hookeriana* Fernald, as well as such acid-soil plants as *Pinus resinosa* Ait. and *Arctostaphy-*

<sup>1</sup> Gerard (or Gerarde), John. The Herball, 752 (1597).

<sup>2</sup> Gerard, Herball, ed. Johnson, 900 (1633).

*los Uva-ursi* (L.) Spreng. On this gravelly slope was an abundance of my most interesting "find," *Arabis Holboellii* Hornem. This is the third station for this species in Quebec. The other two stations, at Bic, and at Cap Rosier at the tip of Gaspé, are both much farther north and in areas which escaped the Wisconsin glaciation. It is, consequently, interesting that, in his study of Pleistocene deposits about Baie St. Paul, Coleman should have found that "The proofs of Wisconsin glaciation are confined to the valley and do not extend to the mountains which rise above it to the east and west."<sup>1</sup>

This region would, no doubt, well repay further botanical investigation, as there are a number of other bluffs along the same river-valley, and several interesting-looking cliffs along the shore between St. Paul and Murray Bay which I did not have time to explore.—G. LEDYARD STEBBINS, JR., Colgate University, Hamilton, N. Y.

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A NEW *SALIX* HYBRID.—***Salix glaucops* × *petrophila***, hybr. nov., *S. glaucopi* similis sed late diffusa vel reptans, ramulis juvenilibus tenuibus, non tomentosis villosis vel glabriusculis; foliis tenuioribus, modice villosis pagina superiore glabriusculis obovatis vel oblongo-oblancoelatis, apice acutis; amentis femineis laxis suberectis stylis 1.5–2.5 mm. longis.—WYOMING: Head of Big Goose Creek, Big Horn Mountains, July 15 to 24, 1893, *Tweedy* 19 (U. S. Nat. Herb.); Trail up Medicine Bow Peak, alt. 10,000 ft., July 22, 1931, *Kelso* 2223; Towner Lake, Medicine Bow Natl. Forest, alt. 9,400 ft., July 21, 1931, *Kelso* 2220; July 5, 1930, *Kelso* 2201 (TYPE, in my collection).

Low creeping specimens of willow with the aspect of *S. glaucops* seem to have been considered the alpine form of that species. However considerable field observation shows that true *S. glaucops* does not assume a creeping habit in the alpine or depauperate state, but becomes smaller in all its parts, retaining the usual foliage characters. The type material was collected in a patch of *S. petrophila* on the east shore of the lake, with tall trees and typical *S. glaucops* growing nearby. Therefore the creeping habit could not be due to environment. The specimens from Medicine Bow Peak were also found near the two parent plants.—LEON KELSO, U. S. Biological Survey, Washington, D. C.

<sup>1</sup> Coleman, *Glacial and Interglacial Periods in Eastern Canada*, Journ. Geol. xxxv. 396 (1927).

INTERNATIONAL ADDRESS BOOK OF BOTANISTS.<sup>1</sup>—The International Address Book, the preparation of which was announced in an early number of the last volume of RHODORA, is now on the market. Sponsored by the Fifth International Botanical Congress, the work has been most efficiently prepared by the Committee; and, exquisitely printed on a thin paper, it gets its more than 600 pages into a thin and compact volume. Such a directory is indispensable to every botanist who cares for exchange relations, and the true botanist who does not desire further contacts is difficult to imagine. As continuous reading matter the Address Book must rank with the City Directory and the Telephone Directory, works which it is most difficult to do without. The term "botanist" has been construed in the light of Professor Seward's presidential preface to the *Report of Proceedings of the Fifth International Botanical Congress*: "All that Botany now embraces is, as Alice in Wonderland said in another connexion, 'a great deal to make one word mean.'" Not only were all botanists invited to enter their addresses and special interests in the work; all botanical institutions, university departments and societies are included. Every up-to-date botanist needs the book on his reference shelf.—M. L. F.

*Volume 34, no. 399, including pages 41 to 56 and one portrait, was issued 7 March, 1932.*

<sup>1</sup> INTERNATIONAL ADDRESS BOOK OF BOTANISTS. 605 and xv, pp. Baillière, Tindall & Cox, 7 & 8 Henrietta Street, Covent Garden, London. Price 12s, 6d, net.



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